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Robert C. Kowert Conley, Rose, & Tayon, P.C. P.O. Box 398 Austin, TX 78767			EXAMINER SERRAO, RANODHI N	
			ART UNIT	PAPER NUMBER
			2141	

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/055,547

Applicant(s)

TRAVERSAT ET AL.

Examiner

Ranodhi Serrao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-99 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-99 is/are rejected.
- 7) ☒ Claim(s) 4-7, 21, 22, 24, 26, 30, 46, 47, 73, 81-83, 88, 89 and 93-95 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see pre-appeal brief request for review, filed 06 February 2006, with respect to the rejection(s) of claim(s) 1-99 under Title 35 U.S.C. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art reference(s) applied to the pending claims. See rejections below.

### ***Allowable Subject Matter***

2. Claims 4-7, 21-22, 24, 26, 30, 46-47, 73, 81-83, 88-89, and 93-95 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. Claims 50-60 are in condition for allowance except for the below formal matters.

### ***Claim Rejections - 35 USC § 101***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 96-99 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

- a) "A carrier medium comprising program instructions" is being considered as nonstatutory functional descriptive material. Applicant is suggested to amend

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the phrase above to be read as "A computer readable medium encoded with program instructions" to overcome the 35 U.S.C. 101 rejection.

- b) "A tangible, computer-accessible medium" is being considered as nonstatutory functional descriptive material. Applicant is suggested to amend the phrase above to be read as "A tangible, computer-readable medium comprising program instructions" to overcome the 35 U.S.C. 101 rejection.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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7. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

8. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-99 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-61, 1-40, 1-71, 1-203, 1-116, and 1-111 of copending Application No. 10/055649, 10/055645, 10/055741, 10/055641, 10/055773, and 10/054809 respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because of their similarities. See comparison table below.

10. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Application No. 10/055,649

<p>1. A peer-to-peer network environment, comprising: a plurality of peer groups, wherein each peer group comprises a plurality of peer group members, and wherein each peer group member comprises a network node configured to communicate with other members of its peer group over one or more networks; wherein each peer group defines a common set of services available to members of that peer group; and wherein a plurality of members of one of said plurality of peer groups are configured to share a network service or content with other members of said peer group only, so that said peer group defines a limited domain of availability for said network service or said content.</p>	<p>1. A device comprising: a processor; a network interface configured to couple the device to a network; and a memory comprising program instructions, wherein the program instructions are executable within the device to: obtain one or more mechanisms for accessing a set of peer-to-peer platform resources from one or more peer nodes on the network, wherein the one or more peer nodes participate in a peer-to-peer environment on the network to discover each other, communicate with each other, and cooperate with each other to form peer groups and share content, and wherein the one or more mechanisms for accessing the set of peer-to-peer platform resources includes: a mechanism for accessing a discovery service for discovering resources in the peer-to-peer environment in accordance with a peer discovery protocol; and a mechanism for accessing a membership service for applying for membership in accordance with a peer membership protocol in one or more peer groups each comprising a set of cooperating peer nodes; and access the set of peer-to-peer platform resources using the one or more mechanisms to participate as a peer node in the peer-to-peer environment.</p>
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***Claim Rejections - 35 USC § 102***

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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12. Claims 1, 8, and 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang (6,810,259).

13. As per claim 1, Zhang teaches a peer-to-peer network environment, comprising: a plurality of peer groups, wherein each peer group comprises a plurality of peer group members, and wherein each peer group member comprises a network node configured to communicate with other members of its peer group over one or more networks (col. 12, lines 8-32); wherein each peer group defines a common set of services available to members of that peer group (col. 14, lines 16-25); and wherein a plurality of members of one of said plurality of peer groups are configured to share a network service or content with other members of said peer group only, so that said peer group defines a limited domain of availability for said network service or said content (column 17, lines 44-55).

14. As per claim 8, Zhang teaches a peer-to-peer network environment, wherein said peer group defines an implicit scope for all peer group messages originating within said peer group, so that a peer group message sent by one of the members of said peer group is sent to the members of said peer group but not outside said peer group (col. 17, lines 44-55).

15. As per claim 16, Zhang teaches a peer-to-peer network environment, wherein said plurality of peer groups comprises a nested peer group within said peer group, wherein all members of said nested peer group belong to said peer group, but not all members of said peer group belong to said nested peer group (col. 16, lines 48-63).

16. As per claim 17, Zhang teaches a peer-to-peer network environment, wherein said common set of services available to members of said nested peer group includes

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at least all of said common set of services available to members of said peer group (col. 16, lines 48-63).

17. As per claim 18, Zhang teaches a peer-to-peer network environment, wherein said network service or content shared within said peer group is also accessible within said nested peer group, wherein said nested peer group is configured to share an additional network service or content available only within said nested peer group and not to members of said peer group that do not also belong to said nested peer group (col. 16, lines 48-63).

18. As per claim 19, Zhang teaches a peer-to-peer network environment, wherein said common set of services available to members of said peer group implement protocols for joining and leaving said peer group and for sharing said network service or content within said peer group, wherein said protocols are platform independent as to programming language implementations and network transport for said common set of services (col. 19, lines 9-35).

19. As per claims 20, Zhang teaches a peer node, comprising: a processor; a network interface operable to couple the peer node to a network; a memory operable to store program instructions, wherein the program instructions are executable by the processor to: join a peer group in accordance with a membership protocol (col. 19, lines 9-35); upon joining said peer group, instantiate one or more of a common set of services defined for said peer group (col. 19, lines 47-56); and share a network service or content with other members of said peer group only, so that said peer group defines



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a limited domain of availability for said network service or said content (col. 17, lines 44-55).

20. Claims 39-41, are rejected under 35 U.S.C. 102(e) as being anticipated by McCanne et al. (6,415,323).

21. As per claim 39, McCanne et al. teaches a peer node, comprising: a processor; a network interface operable to couple the peer node to a network; a memory operable to store program instructions, wherein the program instructions are executable by the processor to: create an advertisement for a peer group in accordance with a protocol, wherein said advertisement for the peer group (col. 8, lines 14-23), comprises: an identifier for the peer group (col. 18, lines 18-24); a description of a common set of services to be instantiated within the peer group by members of the peer group (col. 8, lines 24-39); and a membership service advertisement indicating how others peers may request to join the peer group (col. 5, line 61-col. 6, line 4); and publish at least a portion of said advertisement for the peer group including said identifier and said membership service advertisement (col. 9, lines 28-47).

22. As per claim 40, McCanne et al. teaches a peer node, wherein said advertisement for the peer group further comprises a name associated with the peer group (col. 18, lines 25-48).

23. As per claim 41, McCanne et al. teaches a peer node, wherein said name associated with the peer group is obtained from a centralized naming service coupled to

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the network, so that said name associated with the peer group is unique within the network (col. 9, lines 28-47).

24. Claim 61 is rejected under 35 U.S.C. 102(e) as being anticipated by Borella et al. (6,269,099). Borella teaches a peer computing system, comprising: a plurality of peer nodes; means for a subset of said plurality of peer nodes to discover other peer nodes and discover one or more peer groups, wherein said discovering one or more peer groups comprises discovering one or more peer group advertisements for the peer groups (col. 6, lines 34-60); means for the subset of said plurality of peer nodes to join said discovered peer groups; and wherein each of the one or more peer groups comprises a common set of services shared by member peer nodes of the particular peer group only, so that the particular peer group defines a limited domain of availability for said services (col. 7, lines 37-51).

***Claim Rejections - 35 USC § 103***

25. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

26. Claims 2, 3, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang as applied to claim 1 above, and further in view of McCanne (6,611,872).

27. As per claim 2, Zhang teaches the mentioned limitations of claim 1 above but fails to teach a peer-to-peer network environment, wherein said common set of services comprises a membership service, wherein said membership service implements a

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membership protocol for joining a peer group such that any peer in the peer-to-peer network environment may apply for membership in the peer group in accordance with the membership protocol. However, McCanne teaches a peer-to-peer network environment, wherein said common set of services comprises a membership service, wherein said membership service implements a membership protocol for joining a peer group such that any peer in the peer-to-peer network environment may apply for membership in the peer group in accordance with the membership protocol (see McCanne, col. 8, line 50-col. 9, line 5). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Zhang to a peer-to-peer network environment, wherein said common set of services comprises a membership service, wherein said membership service implements a membership protocol for joining a peer group such that any peer in the peer-to-peer network environment may apply for membership in the peer group in accordance with the membership protocol in order to properly route traffic across the overlay network (see McCanne, col. 4, line 54-col. 5, line 3).

28. As per claim 3, Zhang and McCanne teach the mentioned limitations of claims 1 and 2 above but Zhang fails to teach a peer-to-peer network environment, wherein one or more members of said peer group are configured to provide said membership service for said peer group, wherein said membership service for said peer group implements a membership policy for said peer group restricting which peers in the peer-to-peer network environment are allowed to join said peer group. However, McCanne teaches a peer-to-peer network environment, wherein one or more members of said peer group

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are configured to provide said membership service for said peer group, wherein said membership service for said peer group implements a membership policy for said peer group restricting which peers in the peer-to-peer network environment are allowed to join said peer group (see McCanne, col. 19, lines 9-35). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Zhang to a peer-to-peer network environment, wherein one or more members of said peer group are configured to provide said membership service for said peer group, wherein said membership service for said peer group implements a membership policy for said peer group restricting which peers in the peer-to-peer network environment are allowed to join said peer group in order so that group membership state is reflected into the network in a scalable fashion (see col. 19, lines 1-8).

29. As per claim 11, Zhang teaches the mentioned limitations of claim 1 above but fails to teach a peer-to-peer network environment, wherein said common set of services for said peer group include a peer monitoring service configured to implement a peer information protocol, wherein said peer information protocol defines a message format for requesting and responding to requests regarding peer activity so that said peer groups defines a monitorable domain within the peer-to-peer network environment. However, McCanne teaches a peer-to-peer network environment, wherein said common set of services for said peer group include a peer monitoring service configured to implement a peer information protocol, wherein said peer information protocol defines a message format for requesting and responding to requests regarding peer activity so that said peer groups defines a monitorable domain within the peer-to-

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peer network environment (see McCanne col. 29, lines 19-32). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Zhang to a peer-to-peer network environment, wherein said common set of services for said peer group include a peer monitoring service configured to implement a peer information protocol, wherein said peer information protocol defines a message format for requesting and responding to requests regarding peer activity so that said peer groups defines a monitorable domain within the peer-to-peer network environment in order to allow application-level control to be applied to the transferred data (see McCanne, col. 2, line 60-col. 3, line 8).

30. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang as applied to claims 1 and 8 above, and further in view of Dutta et al. (2002/0073204).

31. As per claim 9, Zhang teaches the mentioned limitations of claims 1 and 8 above but fails to teach a peer-to-peer network environment, wherein one or more peers within said peer group are configured to receive a peer group message from other members of said peer group, wherein said peer group message comprises a query message for content within said peer group. However, Dutta et al. teaches a peer-to-peer network environment, wherein one or more peers within said peer group are configured to receive a peer group message from other members of said peer group, wherein said peer group message comprises a query message for content within said peer group (see Dutta et al., ¶ 37). It would have been obvious to one having ordinary skill in the art

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at the time of the invention to modify Zhang to a peer-to-peer network environment, wherein one or more peers within said peer group are configured to receive a peer group message from other members of said peer group, wherein said peer group message comprises a query message for content within said peer group in order to enable nodes within a peer-to-peer network to act as a distributed file sharing system in which the nodes act cooperatively to form a distributed search engine (see Dutta et al., ¶ 36).

32. As per claim 10, Zhang teaches the mentioned limitations of claims 1, 8, and 9 above but fails to teach a peer-to-peer network environment, wherein said query message is formatted in accordance with a resolver protocol implemented as one of said common set of services for said peer group, wherein said resolver protocol defines query and response message formats. However, Dutta et al. teaches a peer-to-peer network environment, wherein said query message is formatted in accordance with a resolver protocol implemented as one of said common set of services for said peer group, wherein said resolver protocol defines query and response message formats (see Dutta et al., ¶ 41). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Zhang to a peer-to-peer network environment, wherein said query message is formatted in accordance with a resolver protocol implemented as one of said common set of services for said peer group, wherein said resolver protocol defines query and response message formats in order to allow a user of a data sharing application in a peer-to-peer network to review node characterizing data of a node/host that is connected to the user's node (see Dutta et al., abstract).

33. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang as applied to claim 1 above, and further in view of Periasamy et al. (6,065,062).

34. As per claim 12, Zhang teaches the mentioned limitations of claim 1 above but fails to teach a peer-to-peer network environment, wherein a plurality of peer groups members of said peer group are configured to provide redundant instances of said network service or content to said peer group, wherein a member of said peer group can access said network service or content from any of said plurality of peer groups members providing one of the redundant instances of said network service or content. However, Periasamy et al. teaches a peer-to-peer network environment, wherein a plurality of peer groups members of said peer group are configured to provide redundant instances of said network service or content to said peer group, wherein a member of said peer group can access said network service or content from any of said plurality of peer groups members providing one of the redundant instances of said network service or content (see Periasamy et al., col. 10, lines 1-13). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Zhang to a peer-to-peer network environment, wherein a plurality of peer groups members of said peer group are configured to provide redundant instances of said network service or content to said peer group, wherein a member of said peer group can access said network service or content from any of said plurality of peer groups members providing one of the redundant instances of said network service or content in order to achieve high levels of redundancy and responsiveness in a hierarchical,

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asymmetrically organized network without the need for routing devices that are idle most of the time (see Periasamy et al., col. 6, lines 16-45).

35. As per claim 13, Zhang teaches the mentioned limitations of claims 1 and 12 above but fails to teach a peer-to-peer network environment, wherein said plurality of peer groups members providing redundant instances of said network service or content are configured to provide a fail-over mechanism wherein if one of the peers providing said network service or content fails or leaves said peer group, said network service or content may be obtained from another one of the peers providing said network service or content. However, Periasamy et al. teaches a peer-to-peer network environment, wherein said plurality of peer groups members providing redundant instances of said network service or content are configured to provide a fail-over mechanism wherein if one of the peers providing said network service or content fails or leaves said peer group, said network service or content may be obtained from another one of the peers providing said network service or content (see Periasamy et al., col. 8, lines 15-23). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Zhang to a peer-to-peer network environment, wherein said plurality of peer groups members providing redundant instances of said network service or content are configured to provide a fail-over mechanism wherein if one of the peers providing said network service or content fails or leaves said peer group, said network service or content may be obtained from another one of the peers providing said network service or content in order to improve network stability and prevent excessive switching times (see Periasamy et al., col. 5, lines 33-44).



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36. As per claim 14, Zhang teaches the mentioned limitations of claims 1 and 12 above but fails to teach a peer-to-peer network environment, wherein said plurality of peer groups members providing redundant instances of said network service or content support a pipe binding protocol for establishing a communication pipe to access said network service or content, wherein a member of said peer group can access said network service or content by connecting to a pipe to one of the redundant instances of said network service or content. However, Periasamy et al. teaches a peer-to-peer network environment, wherein said plurality of peer groups members providing redundant instances of said network service or content support a pipe binding protocol for establishing a communication pipe to access said network service or content, wherein a member of said peer group can access said network service or content by connecting to a pipe to one of the redundant instances of said network service or content (see Periasamy et al., col. 4, lines 29-49). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Zhang to a peer-to-peer network environment, wherein said plurality of peer groups members providing redundant instances of said network service or content support a pipe binding protocol for establishing a communication pipe to access said network service or content, wherein a member of said peer group can access said network service or content by connecting to a pipe to one of the redundant instances of said network service or content in order to achieve high levels of redundancy and responsiveness in a hierarchical, asymmetrically organized network without the need for routing devices that are idle most of the time (see Periasamy et al., col. 6, lines 16-45).

37. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang and Periasamy et al. as applied to claims 1 and 12-14 above, and further in view of McCanne et al. (6,415,323).

38. As per claim 15, Zhang and Periasamy et al. teach the mentioned limitations of claims 1, 12, and 14 above but fail to teach a peer-to-peer network environment, wherein the plurality of peer groups members providing redundant instances of said network service or content are configured to rebind a communication pipe in accordance with the pipe binding protocol from a failed one of the plurality of peer groups members providing redundant instances of said network service or content to another one of the plurality of peer groups members providing redundant instances of said network service or content so that peer groups members connected to that communication pipe continue to have access to said network service or content. However, McCanne et al. teaches a peer-to-peer network environment, wherein the plurality of peer groups members providing redundant instances of said network service or content are configured to rebind a communication pipe in accordance with the pipe binding protocol from a failed one of the plurality of peer groups members providing redundant instances of said network service or content to another one of the plurality of peer groups members providing redundant instances of said network service or content so that peer groups members connected to that communication pipe continue to have access to said network service or content (see McCanne et al., col. 17, lines 1-18). It would have been obvious to one having ordinary skill in the art at the time of the

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invention to modify Zhang and Periasamy et al. to a peer-to-peer network environment, wherein the plurality of peer groups members providing redundant instances of said network service or content are configured to rebind a communication pipe in accordance with the pipe binding protocol from a failed one of the plurality of peer groups members providing redundant instances of said network service or content to another one of the plurality of peer groups members providing redundant instances of said network service or content so that peer groups members connected to that communication pipe continue to have access to said network service or content in order to scale the Internet infrastructure for mass adoption (see McCanne et al., col. 1, lines 29-47).

39. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang as applied to claim 20 above, and further in view of Lee (6,122,283).

40. As per claim 31, Zhang teaches the mentioned limitations of claim 20 above but fails to teach a peer node, wherein the program instructions are further executable to, upon joining said peer group, provide a peer group advertisement for said peer group, wherein said peer group advertisement comprises: a description of said peer group; membership requirements for said peer group; and one or more pipe endpoint advertisements for receiving membership protocol messages from potential peer group members. However, Lee teaches a peer node, wherein the program instructions are further executable to, upon joining said peer group, provide a peer group advertisement for said peer group, wherein said peer group advertisement comprises: a description of

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said peer group; membership requirements for said peer group; and one or more pipe endpoint advertisements for receiving membership protocol messages from potential peer group members (see Lee, col. 5, lines 8-27). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Zhang to a peer node, wherein the program instructions are further executable to, upon joining said peer group, provide a peer group advertisement for said peer group, wherein said peer group advertisement comprises: a description of said peer group; membership requirements for said peer group; and one or more pipe endpoint advertisements for receiving membership protocol messages from potential peer group members in order to create a method for obtaining a topology representation of a network in the form of a lossless compressed aggregation of optimal paths through such a network (see Lee, col. 1, lines 6-10).

41. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang and Periasamy et al. as applied to claims 20 and 35 above, and further in view of Lowery et al. (2002/0107935). Zhang and Periasamy et al. teach the mentioned limitations of claims 20 and 35 above but fail to teach a peer node wherein, if the peer node is moved from a first physical location to a second physical location, the program instructions are further executable to rebind said communication pipe from an endpoint located at the first network location to the second network location. However, Lowery et al. teaches a peer node wherein, if the peer node is moved from a first physical location to a second physical location, the program instructions are further executable to rebind

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said communication pipe from an endpoint located at the first network location to the second network location (see Lowery et al. paragraph 0093). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Zhang and Periasamy et al. to a peer node wherein, if the peer node is moved from a first physical location to a second physical location, the program instructions are further executable to rebind said communication pipe from an endpoint located at the first network location to the second network location in order for the dynamic cache application to select a community which has the lowest latency from the client (see Lowery et al. paragraph 0096).

42. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCanne et al. as applied to claim 39 above, and further in view of Dutta et al. (2002/0073075). McCanne et al. teaches the mentioned limitations of claim 39 above but fails to teach a peer node, wherein said advertisement for the peer group further comprises keywords for use in indexing and discovering the peer group. However, Dutta et al. teaches a peer node, wherein said advertisement for the peer group further comprises keywords for use in indexing and discovering the peer group (see Dutta et al., ¶ 83). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify McCanne et al. to a peer node, wherein said advertisement for the peer group further comprises keywords for use in indexing and discovering the peer group in order for augmenting conventional search engine results with peer-to-peer search results (see Dutta et al., abstract).

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43. Regarding claims 23, 25, 27-29, 32-36, 38, 43-45, 48, 49, 62-72, 74-80, 84-87, 90-92, and 96-99, the limitations are similar to claims 1-3, 8-20, 31, 37, 39-42, and 61 above and are therefore rejected under the same rationale.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571) 272-7967. The examiner can normally be reached on 8:00-4:30pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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